

WHAT IS CLAIMED IS:

1. An analysis device comprising:
a microporous polymeric membrane integrally bonded to a non-porous injection-molded polymeric support.
2. The analysis device of claim 1, wherein the support includes a raised portion, and the membrane is integrally bonded to the raised portion.
3. The analysis device according to claim 1 or 2 wherein the membrane has a first and second surface and a bulk disposed between the first and second surface, the bulk having a thickness and wherein the bulk thickness is reduced by the heat and pressure of injection molding when the polymeric support is formed.
4. The analysis device according to any one of claims 1-3, wherein the bulk thickness of the membrane is reduced by at least about ten percent when compared to the bulk thickness of the membrane before bonding it to the support.
5. The analysis device according to any of claims 1-4, comprising a membrane having a pore structure reduced by at least about ten percent when compared to the pore structure of the membrane before bonding it to the support.
6. The analysis device of claim 5, comprising a membrane having an average pore size reduced by at least about ten percent when compared to the average pore size of the membrane before bonding it to the support.
7. The analysis device of any one of claims 1-6, wherein the membrane comprises a sulfone membrane.
8. The analysis device of any one of claims 1-6, wherein the membrane comprises a polyamide membrane.
9. The analysis device of claim 7, wherein the membrane is a polyethersulfone membrane.
10. The analysis device of claim 8, wherein the membrane is a nylon membrane.

11. The analysis device of any one of claims 1-10, wherein the membrane comprises a composite including 2 layers.

12. The analysis device of any one of claims 1-11, wherein the support comprises a polymer selected from the group consisting of polystyrene, polyolefin, polycarbonate, polyvinyl chloride, polyurethane, and acrylic.

13. An analysis device comprising a microporous membrane integrally bonded to a non-porous polymeric support by injection molding.

14. A method for making an analysis device comprising:
placing a membrane having a first surface and a second surface in a mold core half;
placing the mold core half in contact with a mold cavity half;
injecting a polymer into the mold cavity half such that the polymer contacts the second surface of the membrane, and forming an analysis device comprising a microporous membrane having a first surface and a second surface and a non-porous injection-molded support having a first surface and a second surface, wherein the second surface of the membrane is integrally bonded to the second surface of the support.

15. The method of claim 14, wherein the polymer injected into the mold cavity half is selected from the group consisting of polystyrene, polyolefin, polycarbonate, polyvinyl chloride, polyurethane, and acrylic.

16. The method of claim 14 or 15, wherein the membrane comprises a polymeric microporous membrane.

17. A method for analyzing biomolecules comprising:
providing at least binding agent comprising one or more probe nucleic acids having nucleotide sequences on a first surface of a microporous membrane of an analysis device such that the probe nucleic acids are immobilized, the probe nucleic acid nucleotide sequences being complementary to a nucleotide sequence of one or more biomolecules of interest,

the analysis device comprising the microporous membrane integrally bonded to a non-porous polymeric injection-molded support, the membrane having a first surface for

receiving the probe nucleic acids and one or more samples containing the biomolecule(s), the membrane having a second surface integrally bonded to a surface of the support;

depositing the sample(s) onto the first surface of the membrane such that the biomolecule(s) contact the probe nucleic acid(s) and one or more complexes are formed, each formed complex comprising a probe nucleic acid nucleotide sequence bound to the complementary nucleotide sequence of the biomolecule; and,

detecting the complexes.